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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,524	11/07/2001	Randolph E. Crutchfield	INTL-0690-US (P13221)	4270
7590 02/23/2006			EXAMINER	
Timothy N. Trop TROP, PRUNER & HU, P.C. 8554 KATY FWY, STE 100 HOUSTON, TX 77024-1805			GRIER, LAURA A	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/045,524	Applicant(s) CRUTCHFIELD, RANDOLPH E.	
	Examiner Laura A. Grier	Art Unit 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 32-34 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 5097378.

Regarding claim 32, Nakabayashi discloses a cassette recorder which comprises an adjustable variable impedance means, which indicates a selectively variable impedance; and controller (5) which receives a state to the recorder, wherein the control sends a control signal in relation the state of the recorder, wherein the impedance may be adjusted therein, accordingly (col. 3, lines 31-34, 51-60, col. 7, lines 15-19, 25-28, and 40-48, col. 12, lines 16-68 – col. 13, lines 1-9).

Regarding claim 33, Nakabayashi discloses everything claimed as applied above (see claim 32). Nakabayashi discloses a cassette tape recorder, which reads on cassette tape.

Regarding claim 34, Nakabayashi discloses everything claimed as applied above (see claim 32). Nakabayashi discloses a sensor coupled to the controller (col. 6, lines 53-56), which indicates a sensor, therein.

3. Claims 35-37 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 5307326.

Regarding claim 35, Osawa discloses a cassette adapter for signal playback apparatus. Osawa disclosure comprises an impedance adjusting circuit (11) – col. 3, lines 43-53, 64-68 and col. 4, lines 3-11, which indicates varying the impedance.

Regarding claim 36, Osawa discloses everything claimed as applied above (see claim 35). Osawa discloses the detect of an operational state of a cassette player enabling a control signal to be provided via the impedance adjusting circuit, which indicates receiving a cassette player command and translating the command for varying impedance - col. 1, lines 55-68 and col. 2, lines 1-11 and col. 3, lines 43-53, 64-68.

Regarding claim 37, Osawa discloses everything claimed as applied above (see claim 35). Osawa further discloses that performance on the invention may be utilized in a digital audio tape recorder of the like (col. 5, lines 57-61), which indicates a remote device in the form of a digital audio player.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 38-39 and 41** are rejected under 35 U.S.C. 102(e) as being anticipated by Adams, U. S. Patent No. 6594366.

Regarding **claim 38**, Adams discloses a headset/radio auto sensing jack (figures 1-3). Adams' disclosure comprises an electronic device (50) with a sensing circuit (figure 3 - 201/210), which includes comparators for detecting and comparing the impedance levels (for sensing low or high impedance from a headphone) - (col. 1, lines 51-67, col. 2, lines 48-57 and

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lines 60-65, col. 3, lines 62-67-col. 4, lines 16-45), which reads on an impedance level detector, and an interface is inherently disclosed as evident of the plug connection of the headphones to the electronic device (figure 2 and 3) for receiving indication that the output from the electronic device has changed, which reads on an interface therein.

Regarding **claim 39**, Adams discloses everything claimed as applied above (see claim 38). Adams discloses that the sensing circuit detects two different impedance levels (col. 1, lines 51-55).

Regarding **claim 41**, Adams discloses everything claimed as applied above (see claim 38). Adams discloses the detection of the impedance when the electronic device is in the AM/FM radio and telephone modes, which inherently indicates that device is in the play mode or play command.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams.

Regarding **claim 41**, Adams discloses everything claimed as applied above (see claim 38). Adams fails to disclose that sensing circuit detecting one of at least four impedance levels. Detecting various impedance levels is well known in the art. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention

of Adams by providing the detection of one of four impedance levels for a device that detection at different operation stages for the purpose of ensuring efficient operating parameters for quality performance as desired for the device.

Response to Arguments

Applicant's arguments with respect to claims 32-41 have been considered but are moot in view of the new ground(s) of rejection.

The applicant essentially argues that the prior art of record, Osawa, fails to disclose a selective or a selectively variable impedance (claim 32) or a control for receiving at least one state, therein. The applicant also argues that Osawa fails to disclose an impedance level detector. The Osawa rejection of claims 32 and 35 has been removed. A new rejection with new references of prior art has been for claim 32 and 35, respectively. For claim 32, the reference teaches a selectively variable impedance and controller with functions accordingly as claimed. For claim 35, another reference is provided with teaches a impedance level detector and inherently discloses an interface coupled thereto.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

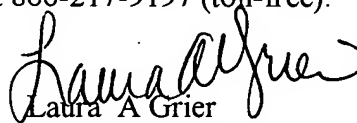
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A. Grier whose telephone number is (571) 272-7518. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Laura A. Grier
Primary Examiner
Art Unit 2644

February 15, 2006